PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Putent Classification 6: (11) International Publication Number: WO 98/09430 H04N 5/00, 7/00 **A2** (43) International Publication Date: 5 March 1998 (05.03.98)

FR

(21) International Application Number: PCT/EP97/05901

(22) International Filing Date: 11 August 1997 (11.08.97)

9 August 1996 (09.08.96)

(71) Applicant (for all designated States except US): THOMSON MULTIMEDIA (FR/FR); 46, quai Alphonse Le Gallo, F-92648 Boulogne Cedex (FR).

(72) Inventors; and

(30) Priority Data:

96/10068

(75) Inventors/Applicants (for US only): STRAUB, Gilles [FR/FR]; (FR), DELITAU, Eric [FR/FR]; Thomson multimedia, 46, quai Alphense Le Gallo, F-92648 Boulogne Cedex (FR).

(74) Agent: RUELLAN-LEMONNIER, Brigitte; Thomson multi-media. 4/., quai Alphonse Le Gallo, F-92648 Boulogne Cedex (FF,

(81) Designated States: CN, JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PI,

Published

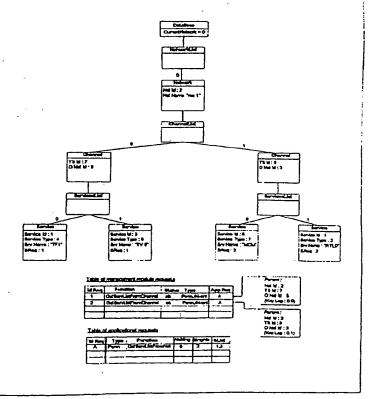
Without international search report and to be republished upon receipt of that report.

Best Available Copy

(54) Title: METHOD FOR INDEXING DATA IN A DIGITAL TELEVISION TRANSMISSION SYSTEM

(57) Abstract

Method for adexing data in a digital television transmission system, ir. particular DVB. The transmission system comprises at least one receiver, which performs the following steps: extract og from a transmitted digital data stream hierarchically organized lists of networks, channels, services, events or descriptors of the same type; creating for each extracted list an array comprising an address pointer for each clement of said extracted list, each address pointer pointing towards a memory area of said receiver in which additional information concerning each element is stored; referring to a given element in a list using a logic key composed of the juxtaposition of the index of said given element in the array to which it belongs and indexes of elements above said given element in said Firrarchy. The invention can be used in the field of digital to vision (DVB, DSS...).



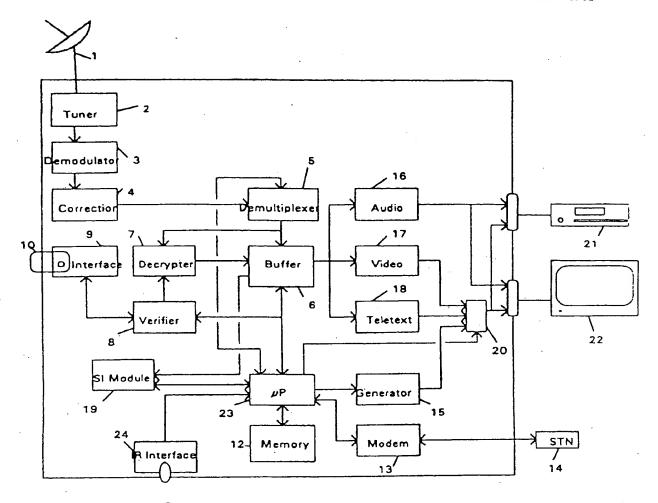




FIG. 1

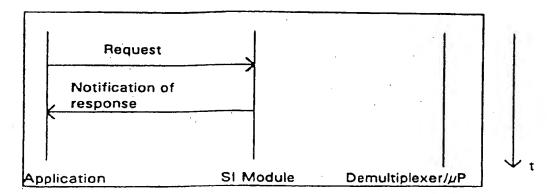


FIG. 2a

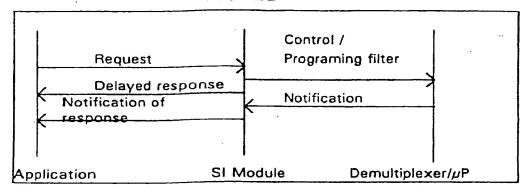


FIG. 2b

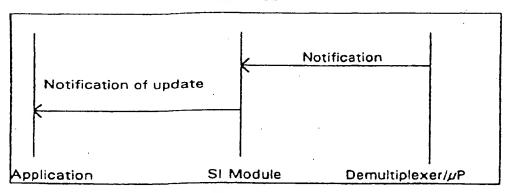
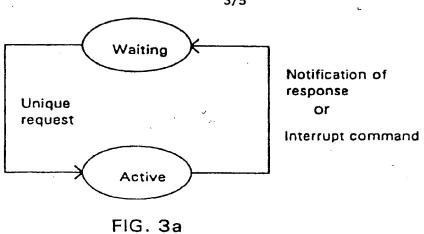
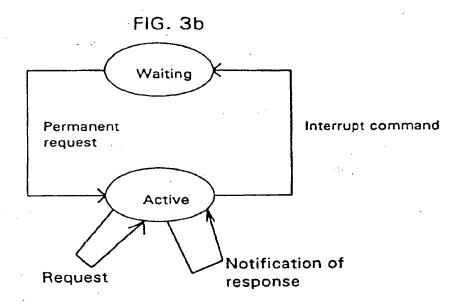
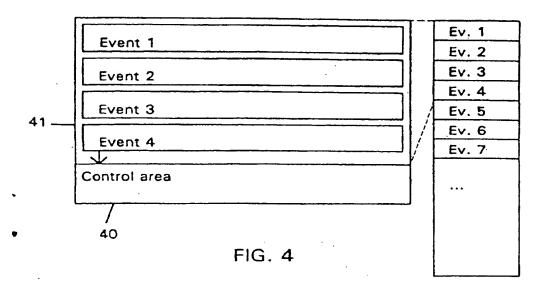


FIG. 2c







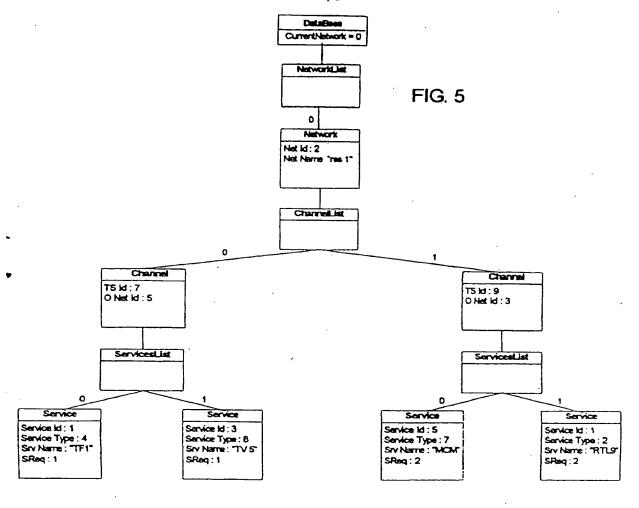


Table of management module requests

| ki Req | Function | Status | Туре | App Req |] | Nex I |
|--------|------------------------|---------|--------------|---------|--------------|-------|
| 1 | GetServListFromChannel | ok | Permu/N-ant | A | \vdash | ON |
| 2 | GetServListFromChannel | ok | Permu/N-erat | A | | (Ke) |
| | | | : | | } | Par |
| | | ـــــــ | · | ł | J | Net |

Table of applicational requests

| | Type | | | Sing/Ib | SList |
|-----|------|----------------------|---|---------|-------|
| A | Perm | : GetServListFromNet | 0 | 2 | 1,2 |
| | | | | | |
| 1 1 | 1 | | | | |

: 2 : 7 : 1d : 5

o.0)

Net ld:2 TS ld:9 O Net ld:3 (Key Log: 0.1)

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

| ☐ BLACK BORDERS |
|---|
| ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES |
| ☐ FADED TEXT OR DRAWING |
| BLURRED OR ILLEGIBLE TEXT OR DRAWING |
| SKEWED/SLANTED IMAGES |
| ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS |
| ☐ GRAY SCALE DOCUMENTS |
| ☐ LINES OR MARKS ON ORIGINAL DOCUMENT |
| ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY |
| OTHER. |

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.